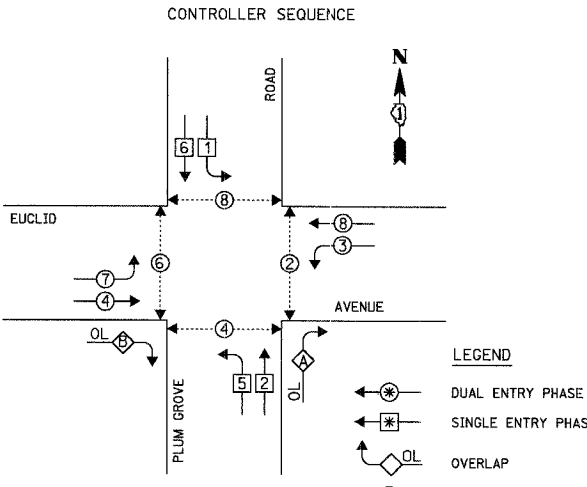


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2585	97-00071-00-PV	COOK	116	78
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

DATE	BY	REVISION

CHRISTOPHER B. BURKE ENGINEERING LTD.  
 9875 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

DATE	BY	REVISION



CONTROLLER SEQUENCE

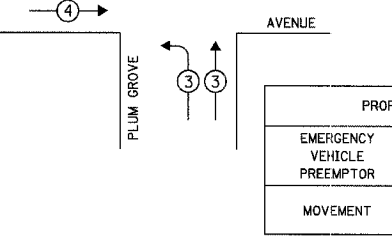
LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 + 3	
B	= 4 + 5	

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

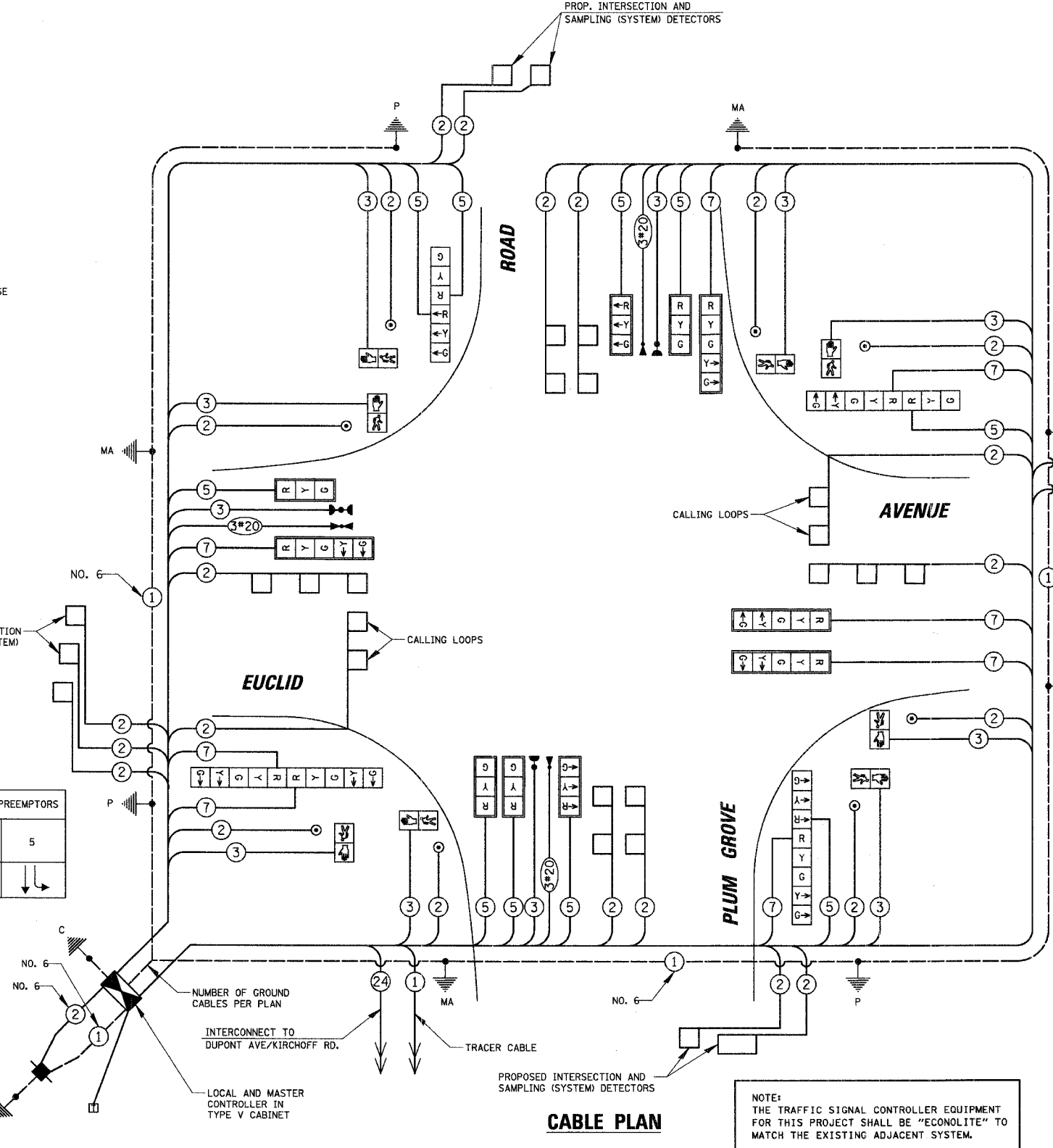
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	→	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	17	0.50	153.00
(YELLOW)	18	25	0.25	112.50
(GREEN)	18	15	0.25	67.50
ARROW	16	12	0.10	19.20
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	25	0.05	-
FLASHER	-	-	0.50	-
ENERGY COSTS TO:	TOTAL =			652.20

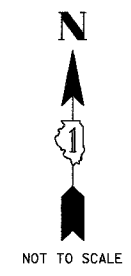
COOK COUNTY HIGHWAY DEPARTMENT  
 69 WEST WASHINGTON STREET  
 CHICAGO, ILLINOIS 60602  
 ENERGY SUPPLY: CONTACT: JOAN COOK  
 PHONE: (847) 816-5461  
 COMPANY: COMED

FOUNDATION (DEPTH)	FT.	(m) CABLE SLACK	FT.	(m) VERTICAL	FT.	(m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)	
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2'	
C - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m)		
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)	
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)	
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)	
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)	
				POST MOUNTED	6 (1.8)	



CABLE PLAN

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
○	□	8" (200mm) TRAFFIC SIGNAL SECTION
○	□	12" (300mm) TRAFFIC SIGNAL SECTION
○	□	12" (300mm) PEDESTRIAN SIGNAL SECTION
○	□	12" (300mm) PEDESTRIAN SIGNAL SECTION
□	□	CONTROLLER CABINET
□	□	SERVICE INSTALLATION
□	□	TELEPHONE INSTALLATION
□	□	VEHICLE DETECTOR, INDUCTION LOOP
□	□	MAGNETIC DETECTOR
□	□	EMERGENCY VEHICLE LIGHT DETECTOR
□	□	CONFIRMATION BEACON
○	○	PUSHBUTTON DETECTOR
○	○	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
○	○	① GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
○	○	② FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
○	○	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
□	□	RAILROAD CONTROL CABINET
□	□	ILLUMINATED SIGN "NO LEFT TURN"
□	□	ILLUMINATED SIGN "NO RIGHT TURN"
□	□	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HH), OR CONTROLLER (C)
□	□	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
□	□	GROUND ROD AT ELECTRIC SERVICE INSTALLATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SQ. FT.	51.5
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	728
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	52
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	71
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	487
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	328
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	924
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1516
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2453
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2395
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1858
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1-PAIR	FOOT	5548
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	30
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	753
ELECTRIC CABLE IN CONDUIT, NO. 20 9C, TWISTED, SHIELDED	FOOT	789
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE B	FOOT	4
CONCRETE FOUNDATION, TYPE D 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	FOOT	17
DETECTOR LOOP TYPE I	FOOT	943
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	12
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	8
SERVICE INSTALLATION, POLE MOUNT	EACH	1

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM**

PLUM GROVE ROAD AND EUCLID AVE.  
 ROLLING MEADOWS, ILLINOIS  
 SCALE: N.T.S. DRAWN BY: FPB  
 DESIGNED BY: ABR  
 CHECKED BY: GMZ  
 DATE: 6/8/2006